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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/736,070

12/13/2000

George C. Crane

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ROPES & GRAY LLP
PATENT DOCKETING 39/361
1211 AVENUE OF THE AMERICAS
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EXAMINER

KESACK, DANIEL

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

10/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/736,070

Applicant(s)

CRANE, GEORGE C.

Examiner

Dan Kesack

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) 60-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/2/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The response to Election/Restriction and response to interrogatory, filed July 2, 2007 have been entered and fully considered. Claims 1-73 are currently pending. Claims 60 and 61 were previously withdrawn. The rejections are as stated below.

Election/Restrictions

2. Applicant's election without traverse of species A in the reply filed on July 2, 2007 is acknowledged. Claims 62-73 are withdrawn as being related to a non-elected species.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-21, 48-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Art Unit: 3691

Claims 1-21, 48-51, The claimed invention as a whole does not accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." See *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention. The mere fact that the claim performs a comparing and draws a conclusion based on the comparing does not satisfy the requirement of 35 U.S.C. 101. The conclusion that a system is "varying erratically", "varying in a trend", or "congesting" is not a concrete, tangible result. The claim may be interpreted in an alternative as involving no more than a manipulation of an abstract idea and therefore is non-statutory under 35 U.S.C. § 101. Even reciting that the data is financial data, and the system is a financial system, does not make the resulting conclusion concrete and tangible. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

5. Claims 1-59 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

Claims 1-59, the systems perform analyzing data and forming a conclusion. However, the conclusion that a system is "varying erratically," "varying in a trend," or "congesting" lacks patentable utility absent a specific environment. Independent claims 1, 22, 35, 48, 52, 56 do not recite a specific environment, or specify what the data pertains to, nor what the system is. While concluding that a system is varying erratically

Art Unit: 3691

may be useful in some environments, it is not necessarily useful information in all cases.

Therefore, the claims lack patentable utility.

Furthermore, Examiner recognizes Applicant's specification contains asserted utilities for certain systems in certain environments (i.e. financial, meteorological, biological). However, Examiner is of the opinion that Applicant's asserted utility relies on what Applicant believes to be errors in contemporary knowledge. According to the MPEP, "One situation where an assertion of utility would not be considered credible is where a person of ordinary skill would consider the assertion to be 'incredible in view of contemporary knowledge' and where nothing offered by the applicant would counter what contemporary knowledge might otherwise suggest." MPEP 2107.02(III)(B).

Specifically, throughout Applicant's specification, Applicant refers to current models of the movement of specific systems which applicant believes to be flawed or incorrect. "These variations of market behavior from expected norms lead to the failure of the known models for market assessment and prediction" (paragraph 5). "Thus, a stock price, whose measurements over time represent a two-dimensional system, does not change purely randomly, as has been believed, but moves based on 'collisions' with orders from buyers and sellers who are buying and selling predominantly haphazardly" (paragraph 27). Furthermore, Applicant has asserted the same in the response to interrogatories, filed July 2, 2007. "Bachelier, Einstein, and H.E. Hurst all adopted the Wiener model. Furthermore, all of them promoted the idea that Brownian Motion was 'random,' and that view is generally held by most people today. Applicant, on the other

Art Unit: 3691

hand, believes that Brownian Motion is not random but contains useful informational content that can be measured" (pages 5-6). "Prior classifications of data ranging at the square-root-of-time have been labeled as purely random. In contrast, Applicant believes randomness does not exist and that informational content can be found at all rates of ranging" (page 10).

Since it appears that the utility of Applicant's invention hinges on commonly held models and interpretations being false, Examiner respectfully requests, if Applicant intends to claim one of the asserted utilities from the specification, Applicant show that the asserted utility is substantial and credible.

Examiner respectfully points out that the non-final rejection filed October 5, 2006 contained a rejection under 35 U.S.C. 101. Applicant subsequently amended the claim language to more clearly assert the useful, concrete, and tangible result. However, the amendment was not sufficient to overcome the rejection under 35 U.S.C. 101, as detailed above. Accordingly, while Examiner could have made the current Office Action a Final Rejection, Examiner has refrained from doing so in the interest of furthering prosecution, and providing Applicant with an opportunity to overcome the continually pending, and new rejections under 35 U.S.C. 101.

Art Unit: 3691

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Kesack whose telephone number is 571-272-5882. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully Submitted,
Dan Kesack
Art Unit 3691
September 25, 2007



ALEXANDER KALINOWSKI
SUPERVISORY PATENT EXAMINER